

Present Capacity of Kerrville Screw-Worm Fly Colony

In a 20' x 50' frame building two rearing vats, one starting cabinet, and sixteen small fly cages (equivalent to four cages at Sebring) are in use. One vat is seeded on Wednesday and the second vat is seeded on Saturday morning. A third vat is available but would be inconvenient to utilize. Four small cages are egged twice a week. One of the four small cages is egged on Monday and a second small cage is egged on Thursday. All fly cages are set up but are not all egged. Flies are allowed to live in the cages for approximately 14 days or until they are needed for setting up another culture.

Should eggs be needed for Sebring on extremely short notice, caged flies of about three different ages would be available for egging; i.e. 14-day-old flies, 11-day-old flies, and 7-8-day-old flies. Arrangements could be made to egg the 14-day-old and 11-day-old flies immediately from which about 700,000 eggs could be obtained for shipment by chartered plane or commercial lines within hours to Tampa or Sebring. The next day the 7-8-day-old flies could be egged and another 700,000 eggs flown to Sebring. Eggs for continuing maximum production at Kerrville would be obtained by egging the flies after departure of the plane for a few hours before their destruction. Within two or three days this procedure could be repeated providing approximately a total of *divided into four shipments on* 3 million eggs to Sebring ~~four~~ different days during the week. Since the cages in use at the present time are loaded in excess of their normal

capacity simply because excess pupae are available (70,000 pupae are reared from each vat and only about 5⁶,000 pupae are needed to set up four small cages) Mr. Driss^e will conduct some tests to determine if he can maintain his egg production at substantially the same rate and release the excess pupae for transportation to Sebring where they would be used to start fly cages there. If we follow this procedure and if 1/5 of the eggs supplied Sebring are used to start a fly colony there, at the end of 34 days the Sebring fly colony would be producing sufficient eggs to maintain a 5 million sterile fly production per week. At the same time sterile fly releases could be begun by the 15th day at the rate of one million sterile flies per week through use of the remaining 4/5 of the Kerrville eggs in seeding vats at Sebring. If it proves out that we can safely transport any excess pupae that are available at Kerrville, establishment of a fly colony at Sebring could be producing eggs substantially sooner than 34 days. Although we would ask Dr. Bushland to step up production to the maximum at Kerrville by going on a 24 hour work basis and by utilizing the third vat available,

